

WHAT IS CLAIMED IS:

1. An image display system comprising:
 - a light source for providing a beam of light along an illumination path;
 - a sequential color filter on said illumination path for filtering said beam of light;
 - a polarizing beam splitter on said illumination path for separating said filtered light beam into a first beam having a first polarization state and a second beam having a second polarization state;
 - a first spatial light modulator receiving and selectively modulating said first beam;
 - a second spatial light modulator receiving and selectively modulating said second beam; and
 - at least one projection lens on a projection path for focusing said first and second beams on an image plane.
2. The three dimensional image display system of Claim 1, said polarizing beam splitter combining said modulated first and second light beams.
3. The three dimensional image display system of Claim 1, said sequential color filter comprising a color wheel.
4. The three dimensional image display system of Claim 1, said sequential color filter comprising a spiral color wheel.
5. The three dimensional image display system of Claim 1, comprising:
 - at least one prism in said illumination and said projection paths for separating said filtered illumination light beam and said modulated light beam.
6. The three dimensional image display system of Claim 1, comprising:

a first prism in said illumination and said projection paths for separating said first beam directed to said first modulator and said modulated first beam from said first modulator; and

a second prism in said illumination and said projection paths for separating said second beam directed to said second modulator and said modulated second beam from said second modulator.

7. The three dimensional image display system of Claim 1, modulated light from said first modulator passing through a first projection lens and light from said second modulator passing through a second projection lens.
8. The three dimensional image display system of Claim 1, wherein said first and second modulators are positioned such that pixelated images from said first and second modulators are offset by approximately one-half pixel in a horizontal direction at said image plane.
9. The three dimensional image display system of Claim 1, wherein said first and second modulators are positioned such that pixelated images from said first and second modulators are offset by approximately one-half pixel in a vertical direction at said image plane.
10. The three dimensional image display system of Claim 1, wherein said first and second modulators are positioned such that pixelated images from said first and second modulators are offset by approximately one-half pixel in both a horizontal and a vertical direction at said image plane.
11. The three dimensional image display system of Claim 1, said first modulator comprising a micromirror device.

12. The three dimensional image display system of Claim 1, said first modulator comprising a liquid crystal device.
13. The three dimensional image display system of Claim 1 comprising:
 - a recycling integrator on said illumination path for homogenizing said light beam prior to said sequential color filter.
14. The three dimensional image display system of Claim 13, wherein said recycling integrator is a solid integrating rod having a mirrored input aperture.
15. The three dimensional image display system of Claim 13, wherein said recycling integrator is a hollow integrating rod having a mirrored input aperture.
16. The three dimensional image display system of Claim 1, comprising polarized eyewear for a viewer of said image display system.
17. A method of producing an image, said method comprising:
 - providing a beam of light along an illumination path;
 - sequentially color filtering said beam of light;
 - splitting said filtered light beam into a first beam having a first polarization state and a second beam having a second polarization state;
 - modulating said first beam using a first spatial light modulator;
 - modulating said second beam using a second spatial light modulator; and
 - focusing said first and second modulated light beams on an image plane.
18. The method of Claim 17, comprising:
 - combining said modulated said modulated first and second light beams.
19. The method of Claim 17, said sequentially color filtering comprising sequentially filtering said beam of light using a color wheel.

20. The method of Claim 17, said sequentially color filtering comprising sequentially filtering said beam of light using a spiral color wheel.
21. The method of Claim 17, comprising:
- separating said filtered illumination light beam and said modulated light beam using at least one prism in said illumination and said projection paths.
22. The method of Claim 17, comprising:
- separating said first beam directed to said first modulator and said modulated first beam from said first modulator using a first prism in said illumination and said projection paths; and
 - separating said second beam directed to said second modulator and said modulated second beam from said second modulator using a second prism in said illumination and said projection paths.
23. The method of Claim 17, said focusing said first and second modulated light beams on an image plane comprising:
- focusing said first modulated light beam on said image plane using a first lens;
 - and
 - focusing said second modulated light beam on said image plane using a second lens.
24. The method of Claim 17, said first and second modulators forming pixelated images on said image plane; comprising:
- positioning said first and second modulators such that said pixelated images are offset by approximately one-half pixel at said image plane.

25. The method of Claim 17, said first and second modulators forming pixelated images on said image plane; comprising:

positioning said first and second modulators such that said pixelated images are offset by approximately one-half pixel in a horizontal direction at said image plane.

26. The method of Claim 17, said first and second modulators forming pixelated images on said image plane; comprising:

positioning said first and second modulators such that said pixelated images are offset by approximately one-half pixel in a vertical direction at said image plane.

27. The method of Claim 17, said first and second modulators forming pixelated images on said image plane; comprising:

positioning said first and second modulators such that said pixelated images are offset by approximately one-half pixel in both a horizontal and a vertical direction at said image plane.

28. The method of Claim 17, said modulating said first beam comprising:

modulating said first beam using a micromirror device.

29. The method of Claim 17, said modulating said first beam comprising:

modulating said first beam using a liquid crystal device.

30. The method of Claim 17, comprising:

homogenizing said light beam using a recycling integrator prior to sequentially color filtering said beam of light.

31. The method of Claim 30, said homogenizing said light beam using a recycling integrator comprising:

homogenizing said light beam using a solid integrating rod having a mirrored input aperture.

32. The method of Claim 30, said homogenizing said light beam using a recycling integrator comprising:

homogenizing said light beam using a hollow integrating rod having a mirrored input aperture.

TI-30544 - Page 19